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DB nucleic - nucleic search, using sw model

Run on: September 11, 2003, 15:02:03 ; Search time 4 Seconds

(without alignments)
 2.435 Million cell updates/sec

Title: 10-009897-20

perfect score: 20

Sequence: 1 ctgttaatggcaagtcttag 20

scoring table: IDENTITY_NDC

gapop 10.0 , Gapext 0.5

searched: 112 seqs, 243491 residues

Total number of hits satisfying chosen parameters: 224

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 112 summaries

database : 6492110.seq: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

result No.	Score	Query	Match	Length	DB	ID	Description
1	20	100.0	2583	1	US-09-184-418C-44		Sequence 44, Appli
2	20	100.0	2640	1	US-09-184-418C-41		Sequence 41, Appli
3	20	100.0	2658	1	US-09-184-418C-42		Sequence 42, Appli
4	20	100.0	8922	1	US-09-184-418C-4		Sequence 4, Appli
5	18.4	92.0	2544	1	US-09-184-418C-89		Sequence 89, Appli
6	18.4	92.0	2598	1	US-09-184-418C-98		Sequence 98, Appli
7	18.4	92.0	2631	1	US-09-184-418C-87		Sequence 87, Appli
8	18.4	92.0	2646	1	US-09-184-418C-86		Sequence 86, Appli
9	18.4	92.0	2655	1	US-09-184-418C-95		Sequence 95, Appli
10	18.4	92.0	2721	1	US-09-184-418C-15		Sequence 96, Appli
11	18.4	92.0	8972	1	US-09-184-418C-9		Sequence 9, Appli
12	18.4	92.0	9060	1	US-09-184-418C-10		Sequence 10, Appli
13	17.4	87.0	2529	1	US-09-184-418C-62		Sequence 62, Appli
14	17.4	87.0	2541	1	US-09-184-418C-18		Sequence 18, Appli
15	17.4	87.0	2601	1	US-09-184-418C-60		Sequence 60, Appli
16	17.4	87.0	2610	1	US-09-184-418C-15		Sequence 15, Appli
17	17.4	87.0	2652	1	US-09-184-418C-61		Sequence 61, Appli
18	17.4	87.0	2661	1	US-09-184-418C-16		Sequence 16, Appli
19	17.4	87.0	8934	1	US-09-184-418C-6		Sequence 6, Appli
20	17.4	87.0	8958	1	US-09-184-418C-1		Sequence 1, Appli
21	16.8	84.0	2607	1	US-09-184-418C-80		Sequence 80, Appli
22	16.8	84.0	2666	1	US-09-184-418C-77		Sequence 77, Appli
23	16.8	84.0	2694	1	US-09-184-418C-78		Sequence 78, Appli
24	16.8	84.0	9010	1	US-09-184-418C-8		Sequence 8, Appli
25	15.2	76.0	2538	1	US-09-184-418C-36		Sequence 36, Appli
26	15.2	76.0	2538	1	US-09-184-418C-54		Sequence 54, Appli
27	15.2	76.0	2550	1	US-09-184-418C-28		Sequence 28, Appli
28	15.2	76.0	2571	1	US-09-184-418C-71		Sequence 71, Appli
29	15.2	76.0	2579	1	US-09-184-418C-51		Sequence 51, Appli
30	15.2	76.0	2597	1	US-09-184-418C-25		Sequence 25, Appli
31	15.2	76.0	2606	1	US-09-184-418C-33		Sequence 33, Appli
32	15.2	76.0	2643	1	US-09-184-418C-68		Sequence 68, Appli
33	15.2	76.0	2645	1	US-09-184-418C-52		Sequence 52, Appli

34	15.2	76.0	2657	1	US-09-184-418C-34		Sequence 34, Appli
35	15.2	76.0	2663	1	US-09-184-418C-66		Sequence 26, Appli
36	15.2	76.0	2688	1	US-09-184-418C-3		Sequence 6, Appli
37	15.2	76.0	6953	1	US-09-184-418C-5		Sequence 5, Appli
38	15.2	76.0	6966	1	US-09-184-418C-5		Sequence 2, Appli
39	15.2	76.0	9050	1	US-09-184-418C-7		Sequence 7, Appli
40	15.2	76.0	2571	1	US-09-184-418C-71		Sequence 71, Appli
41	13.8	69.0	2643	1	US-09-184-418C-68		Sequence 69, Appli
42	13.8	69.0	2688	1	US-09-184-418C-59		Sequence 59, Appli
43	13.8	69.0	9050	1	US-09-184-418C-7		Sequence 7, Appli
44	13.8	69.0	9050	1	US-09-184-418C-107		Sequence 107, Appli
45	13.6	68.0	2574	1	US-09-184-418C-104		Sequence 104, Appli
46	13.6	68.0	2633	1	US-09-184-418C-20		Sequence 105, Appli
47	13.6	68.0	8987	1	US-09-184-418C-105		Sequence 105, Appli
48	13.6	68.0	2651	1	US-09-184-418C-111		Sequence 11, Appli
49	10.6	53.0	621	1	US-09-184-418C-91		Sequence 81, Appli
50	10.6	53.0	624	1	US-09-184-418C-32		Sequence 32, Appli
51	10.6	53.0	624	1	US-09-184-418C-20		Sequence 90, Appli
52	10.6	53.0	579	1	US-09-184-418C-2		Sequence 2, Appli
53	10.4	52.0	624	1	US-09-184-418C-108		Sequence 108, Appli
54	10.4	52.0	3000	1	US-09-184-418C-74		Sequence 74, Appli
55	10.4	52.0	3011	1	US-09-184-418C-101		Sequence 101, Appli
56	10.4	52.0	5012	1	US-09-184-418C-92		Sequence 92, Appli
57	10.4	52.0	3017	1	US-09-184-418C-34		Sequence 83, Appli
58	9.8	49.0	579	1	US-09-184-418C-63		Sequence 50, Appli
59	9.8	49.0	3012	1	US-09-184-418C-57		Sequence 57, Appli
60	9.8	49.0	4307	1	US-09-184-418C-48		Sequence 48, Appli
61	9.8	49.0	8953	1	US-09-184-418C-3		Sequence 3, Appli
62	9.6	48.0	2538	1	US-09-184-418C-34		Sequence 52, Appli
63	9.6	48.0	2538	1	US-09-184-418C-26		Sequence 54, Appli
64	9.6	48.0	2657	1	US-09-184-418C-57		Sequence 28, Appli
65	9.6	48.0	2663	1	US-09-184-418C-101		Sequence 101, Appli
66	9.6	48.0	3012	1	US-09-184-418C-57		Sequence 57, Appli
67	9.6	48.0	2645	1	US-09-184-418C-52		Sequence 52, Appli
68	9.6	48.0	2657	1	US-09-184-418C-34		Sequence 34, Appli
69	9.6	48.0	3017	1	US-09-184-418C-20		Sequence 26, Appli
70	9.6	48.0	3017	1	US-09-184-418C-57		Sequence 57, Appli
71	9.6	48.0	3012	1	US-09-184-418C-93		Sequence 83, Appli
72	9.6	48.0	3017	1	US-09-184-418C-48		Sequence 48, Appli
73	9.6	48.0	4307	1	US-09-184-418C-48		Sequence 6, Appli
74	9.6	48.0	8954	1	US-09-184-418C-6		Sequence 11, Appli
75	9.6	48.0	8959	1	US-09-184-418C-11		Sequence 5, Appli
76	9.6	48.0	8966	1	US-09-184-418C-5		Sequence 1, Appli
77	9.6	48.0	8968	1	US-09-184-418C-1		Sequence 9, Appli
78	9.6	48.0	8972	1	US-09-184-418C-9		Sequence 4, Appli
79	9.6	48.0	8976	1	US-09-184-418C-4		Sequence 10, Appli
80	9.6	48.0	8979	1	US-09-184-418C-4		Sequence 10, Appli
81	9.6	48.0	8982	1	US-09-184-418C-4		Sequence 42, Appli
82	9.6	48.0	8986	1	US-09-184-418C-4		Sequence 12, Appli
83	9.6	48.0	8990	1	US-09-184-418C-4		Sequence 40, Appli
84	9.6	48.0	8994	1	US-09-184-418C-66		Sequence 63, Appli
85	9.6	48.0	2583	1	US-09-184-418C-63		Sequence 32, Appli
86	9.6	48.0	2640	1	US-09-184-418C-44		Sequence 41, Appli
87	9.6	48.0	2658	1	US-09-184-418C-4		Sequence 42, Appli
88	9.6	48.0	2664	1	US-09-184-418C-10		Sequence 108, Appli
89	9.6	48.0	2674	1	US-09-184-418C-40		Sequence 44, Appli
90	9.6	48.0	2678	1	US-09-184-418C-63		Sequence 45, Appli
91	9.6	48.0	2682	1	US-09-184-418C-44		Sequence 46, Appli
92	9.6	48.0	2686	1	US-09-184-418C-44		Sequence 47, Appli
93	9.6	48.0	2690	1	US-09-184-418C-42		Sequence 48, Appli
94	9.6	48.0	2694	1	US-09-184-418C-42		Sequence 49, Appli
95	9.6	48.0	2698	1	US-09-184-418C-39		Sequence 50, Appli
96	9.6	48.0	2702	1	US-09-184-418C-39		Sequence 51, Appli
97	9.6	48.0	2706	1	US-09-184-418C-39		Sequence 52, Appli
98	9.6	48.0	2710	1	US-09-184-418C-39		Sequence 53, Appli
99	9.6	48.0	2714	1	US-09-184-418C-39		Sequence 54, Appli
100	9.6	48.0	2718	1	US-09-184-418C-39		Sequence 55, Appli
101	9.6	48.0	2722	1	US-09-184-418C-39		Sequence 56, Appli
102	9.6	48.0	2726	1	US-09-184-418C-39		Sequence 57, Appli
103	9.6	48.0	2730	1	US-09-184-418C-39		Sequence 58, Appli
104	9.6	48.0	2734	1	US-09-184-418C-39		Sequence 59, Appli
105	9.6	48.0	2738	1	US-09-184-418C-39		Sequence 60, Appli
106	8.8	44.0	579	1	US-09-184-418C-49		Sequence 49, Appli
107	8.8	44.0	579	1	US-09-184-418C-75		Sequence 50, Appli

ALIGNMENTS

RESULT 1
US-09-184-418C-44
; Sequence 44, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN VIRUS TYPE 1
; CURRENT APPLICATION NUMBER: US/09184418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 42
; LENGTH: 2658
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=92RW009; gene=rev
US-09-184-418C-42
Query Match 100.0%; Score 20; DB 1; Length 2658;
Best Local Similarity 100.0%; Pred. No. 0.34; Mismatches 0; Indels 0; Gaps 0;
QY 1 CTGTTAAATGGCAAGTCAGC 20
Db 1046 CTGTTAAATGGCAAGTCAGC 1065

RESULT 2
US-09-184-418C-41
; Sequence 41, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN VIRUS TYPE 1
; CURRENT APPLICATION NUMBER: US/09184418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 41
; LENGTH: 2640
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=92RW009; gene=tat
US-09-184-418C-41
Query Match 100.0%; Score 20; DB 1; Length 2640;
Best Local Similarity 100.0%; Pred. No. 0.34; Mismatches 0; Indels 0; Gaps 0;
QY 1 CTGTTAAATGGCAAGTCAGC 20
Db 1185 CTGTTAAATGGCAAGTCAGC 1204

RESULT 3
US-09-184-418C-42
; Sequence 42, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09184418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 42
; LENGTH: 2658
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=92RW009; gene=rev
US-09-184-418C-42
Query Match 100.0%; Score 20; DB 1; Length 2658;
Best Local Similarity 100.0%; Pred. No. 0.34; Mismatches 0; Indels 0; Gaps 0;
QY 1 CTGTTAAATGGCAAGTCAGC 20
Db 1046 CTGTTAAATGGCAAGTCAGC 1065

RESULT 4
US-09-184-418C-4
; Sequence 4, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09184418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 4
; LENGTH: 8992
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=92RW009; 139-1624; gag; 1690-4428; pol(N-terminus uncertain);
; OTHER INFORMATION: 4313.495.;v1.f; 481.5.81.;vpr; 5162.7801;tat; 5301.7958;rev;
; OTHER INFORMATION: 5403.5648;vpu; 5566.8148;env; 8150.8773;ref;
US-09-184-418C-4
Query Match 100.0%; Score 20; DB 1; Length 8992;
Best Local Similarity 100.0%; Pred. No. 0.31; Mismatches 0; Indels 0; Gaps 0;
QY 1 CTGTTAAATGGCAAGTCAGC 20
Db 6346 CTGTTAAATGGCAAGTCAGC 6365

RESULT 5
US-09-184-418C-89
; Sequence 89, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN

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TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 89
LENGTH: 2544
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=96AM751.3; gene=env
US-09-184-418C-89

RESULT 6
Query Match 92.0%; Score 18.4; DB 1; Length 2544;
Best Local Similarity 95.0%; Pred. No. 0.9;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 98
LENGTH: 2598
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=94CY017.41; gene=env
US-09-184-418C-98

RESULT 7
Query Match 92.0%; Score 18.4; DB 1; Length 2598;
Best Local Similarity 95.0%; Pred. No. 0.9;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 87
LENGTH: 2631
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=96AM751.3; gene=rev
US-09-184-418C-87

RESULT 8
Query Match 92.0%; Score 18.4; DB 1; Length 2631;
Best Local Similarity 95.0%; Pred. No. 0.9;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 86
LENGTH: 646
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=96AM751.3; gene=tat
US-09-184-418C-86

RESULT 9
Query Match 92.0%; Score 18.4; DB 1; Length 2646;
Best Local Similarity 95.0%; Pred. No. 0.9;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 95
LENGTH: 1197
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=94CY017.41; gene=tat
US-09-184-418C-95

Query Match 92.0%; Score 18.4; DB 1; Length 2655;
Best Local Similarity 95.0%; Pred. No. 0.9;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 87
LENGTH: 2631
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=96AM751.3; gene=rev
US-09-184-418C-96

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; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE: OTHER INFORMATION: isolate=93BR020; gene=env
US-09-184-418C-18

Query Match          87.0%; Score 17.4; DB 1; Length 2541;
Best Local Similarity 94.7%; Pred. No. 1.6;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy      2 TGTAAATGGCAAGCTAGC 20
Db      785 TGTAAATGGCAAGCTAGC 803

RESULT 15
US-09-184-418C-60
Sequence 60, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 61
LENGTH: 2652
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: Isolate=93BR029; gene=rev
US-09-184-418C-61

Query Match          87.0%; Score 17.4; DB 1; Length 2652;
Best Local Similarity 94.7%; Pred. No. 1.6;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy      2 TGTAAATGGCAAGCTAGC 20
Db      1050 TGTAAATGGCAAGCTAGC 1068

RESULT 16
US-09-184-418C-15
Sequence 15, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 15
LENGTH: 2661
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: Isolate=93BR020; gene=rev
US-09-184-418C-16

Query Match          87.0%; Score 17.4; DB 1; Length 2661;
Best Local Similarity 94.7%; Pred. No. 1.6;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy      2 TGTAAATGGCAAGCTAGC 20
Db      1047 TGTAAATGGCAAGCTAGC 1065

RESULT 17
US-09-184-418C-6
Sequence 6, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 6
LENGTH: 2652
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: Isolate=93BR029; gene=rev
US-09-184-418C-61

Query Match          87.0%; Score 17.4; DB 1; Length 2652;
Best Local Similarity 94.7%; Pred. No. 1.6;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy      2 TGTAAATGGCAAGCTAGC 20
Db      1050 TGTAAATGGCAAGCTAGC 1068

```

APPLICANT: Shaw, George
 TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 FILE REFERENCE: D6287
 CURRENT APPLICATION NUMBER: US/09/184,418C
 CURRENT FILING DATE: 1999-11-02
 NUMBER OF SEQ ID NOS: 112
 SEQ ID NO: 6
 LENGTH: 8954
 TYPE: DNA
 ORGANISM: Human immunodeficiency virus type 1
 FEATURE:
 OTHER INFORMATION: isolate=93BR029; 142..157:gene="gag"; 1437..4448:gene="pol";
 OTHER INFORMATION: 4393..4971:gene="vif"; 4911..5201:gene="vpr";
 OTHER INFORMATION: 5182..7782:gene="tat"; 521..7972:gene="rev";
 OTHER INFORMATION: 5586..8114:gene="env"; 8116..8736:gene="nef";
 US-09-184-418C-6

Query Match Score 87.0%; Score 17.4%; DB 1; Length 8954;
 Best Local Similarity 94.7%; Pred. No. 1.5;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 2 TGTAAATGGCACTAGC 20.
 Db 6370 TGTAAATGGCAGCCTAGC 6388

RESULT 20
 US-09-184-418C-1
 Sequence 1, Application US/09184418C
 Patent No. 6492110
 GENERAL INFORMATION:
 APPLICANT: Hahn, Beatrice
 APPLICANT: Gao, Feng
 APPLICANT: Shaw, George
 APPLICANT: Shaw, George
 TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 FILE REFERENCE: D6287
 CURRENT APPLICATION NUMBER: US/09/184,418C
 CURRENT FILING DATE: 1999-11-02
 NUMBER OF SEQ ID NOS: 112
 SEQ ID NO: 1
 LENGTH: 8968
 TYPE: DNA
 ORGANISM: Human immunodeficiency virus type 1
 FEATURE:
 OTHER INFORMATION: isolate=93BR020; 133..1611:gene; 4369..4947:rev;
 OTHER INFORMATION: 4887..8967:vpr; 5158..7767:tat; 5297..7937:rev;
 OTHER INFORMATION: 5396..5641:vpu; 5559..8099:env; 8101..8727:nef
 US-09-184-418C-1

Query Match Score 87.0%; Score 17.4%; DB 1; Length 8968;
 Best Local Similarity 94.7%; Pred. No. 1.5;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 2 TGTAAATGGCACTAGC 20.
 Db 6343 TGTAAATGGCAGCCTAGC 6361

RESULT 21
 US-09-184-418C-80
 Sequence 80, Application US/09184418C
 Patent No. 6492110
 GENERAL INFORMATION:
 APPLICANT: Hahn, Beatrice
 APPLICANT: Gao, Feng
 APPLICANT: Shaw, George
 TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 FILE REFERENCE: D6287
 CURRENT APPLICATION NUMBER: US/09/184,418C
 CURRENT FILING DATE: 1999-11-02
 NUMBER OF SEQ ID NOS: 112
 SEQ ID NO: 78
 LENGTH: 2684
 TYPE: DNA
 ORGANISM: Human immunodeficiency virus type 1
 FEATURE:
 OTHER INFORMATION: isolate=962M651.8; gene=rev
 US-09-184-418C-78

Query Match Score 84.0%; Score 16.8%; DB 1; Length 2684;
 Best Local Similarity 90.0%; Pred. No. 2.3;

NUMBER OF SEQ ID NOS: 112
 SEQ ID NO: 80
 LENGTH: 2607
 TYPE: DNA
 ORGANISM: Human immunodeficiency virus type 1
 FEATURE:
 OTHER INFORMATION: isolate=967M651.8; gene=env
 US-09-184-418C-80

Query Match Score 84.0%; Score 16.8%; DB 1; Length 2607;
 Best Local Similarity 90.0%; Pred. No. 2.3;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Qy 1 CTGTTAAATGGCAGTCCTAGC 20
 Db 814 CTGTTAAATGGCAGTCCTAGC 833

RESULT 22
 US-09-184-418C-77
 Sequence 77, Application US/09184418C
 Patent No. 6492110
 GENERAL INFORMATION:
 APPLICANT: Hahn, Beatrice
 APPLICANT: Gao, Feng
 APPLICANT: Shaw, George
 APPLICANT: Shaw, George
 TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 FILE REFERENCE: D6287
 CURRENT APPLICATION NUMBER: US/09/184,418C
 CURRENT FILING DATE: 1999-11-02
 NUMBER OF SEQ ID NOS: 112
 SEQ ID NO: 77
 LENGTH: 2666
 TYPE: DNA
 ORGANISM: Human immunodeficiency virus type 1
 FEATURE:
 OTHER INFORMATION: isolate=962M651.8; gene=tat
 US-09-184-418C-77

Query Match Score 84.0%; Score 16.8%; DB 1; Length 2666;
 Best Local Similarity 90.0%; Pred. No. 2.3;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;;

Qy 1 CTGTTAAATGGCAGTCCTAGC 20
 Db 1220 CTGTTAAATGGCAGTCCTAGC 1239

RESULT 23
 US-09-184-418C-78
 Sequence 78, Application US/09184418C
 Patent No. 6492110
 GENERAL INFORMATION:
 APPLICANT: Hahn, Beatrice
 APPLICANT: Gao, Feng
 APPLICANT: Shaw, George
 APPLICANT: Shaw, George
 TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 FILE REFERENCE: D6287
 CURRENT APPLICATION NUMBER: US/09/184,418C
 CURRENT FILING DATE: 1999-11-02
 NUMBER OF SEQ ID NOS: 112
 SEQ ID NO: 78
 LENGTH: 2684
 TYPE: DNA
 ORGANISM: Human immunodeficiency virus type 1
 FEATURE:
 OTHER INFORMATION: isolate=962M651.8; gene=rev
 US-09-184-418C-78

Query Match Score 84.0%; Score 16.8%; DB 1; Length 2684;
 Best Local Similarity 90.0%; Pred. No. 2.3;

Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0; Length: 9010
 QY 1 CTGTTAAATGGCAGTCAGC 20 ; Sequence 8, Application US/09184418C
 Db 1081 CGTAAATGGCTAGC 1100 ;
RESULT 24
 US-09-184-418C-8
 ; Sequence 8, Application US/09184418C
 ; Patent No. 6492110
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice
 ; APPLICANT: Gao, Feng
 ; APPLICANT: Shaw, George
 ; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1
 ; FILE REFERENCE: D6287
 ; CURRENT APPLICATION NUMBER: US/09/184,418C
 ; CURRENT FILING DATE: 1999-11-02
 ; NUMBER OF SEQ ID NOS: 112
 ; SEQ ID NO 54
 ; LENGTH: 2538
 ; TYPE: DNA
 ; ORGANISM: Human immunodeficiency virus type 1
 ; FEATURE:
 ; OTHER INFORMATION: Isolate=92NG003; gene-env
 US-09-184-418C-54

Query Match Score 76.0%; Score 15.2%; DB 1; Length 2538;
 Best Local Similarity 85.0%; Pred. No. 6.1%;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

RESULT 27
 US-09-184-418C-28
 ; Sequence 28, Application US/09184418C
 ; Patent No. 6492110
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice
 ; APPLICANT: Gao, Feng
 ; APPLICANT: Shaw, George
 ; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1
 ; FILE REFERENCE: D6287
 ; CURRENT APPLICATION NUMBER: US/09/184,418C
 ; CURRENT FILING DATE: 1999-11-02
 ; NUMBER OF SEQ ID NOS: 112
 ; SEQ ID NO 28
 ; LENGTH: 2550
 ; TYPE: DNA
 ; ORGANISM: Human immunodeficiency virus type 1
 ; FEATURE:
 ; OTHER INFORMATION: Isolate=92NG083; gene-env
 US-09-184-418C-28

Query Match Score 76.0%; Score 15.2%; DB 1; Length 2550;
 Best Local Similarity 85.0%; Pred. No. 6.1%;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

RESULT 28
 US-09-184-418C-71
 ; Sequence 71, Application US/09184418C
 ; Patent No. 6492110
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice
 ; APPLICANT: Gao, Feng
 ; APPLICANT: Shaw, George
 ; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1
 ; FILE REFERENCE: D6287
 ; CURRENT APPLICATION NUMBER: US/09/184,418C

Query Match Score 76.0%; Score 15.2%; DB 1; Length 2538;
 Best Local Similarity 85.0%; Pred. No. 6.1%;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

RESULT 26
 US-09-184-418C-36
 ; Sequence 36, Application US/09184418C
 ; Patent No. 6492110
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice
 ; APPLICANT: Gao, Feng
 ; APPLICANT: Shaw, George
 ; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1
 ; FILE REFERENCE: D6287
 ; CURRENT APPLICATION NUMBER: US/09/184,418C
 ; CURRENT FILING DATE: 1999-11-02
 ; NUMBER OF SEQ ID NOS: 112
 ; SEQ ID NO 36
 ; LENGTH: 2538
 ; TYPE: DNA
 ; ORGANISM: Human immunodeficiency virus type 1
 ; FEATURE:
 ; OTHER INFORMATION: Isolate=90CR056; gene-env
 US-09-184-418C-36

Query Match Score 76.0%; Score 15.2%; DB 1; Length 2538;
 Best Local Similarity 85.0%; Pred. No. 6.1%;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

RESULT 29
 US-09-184-418C-20
 ; Sequence 29, Application US/09184418C
 ; Patent No. 6492110
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice
 ; APPLICANT: Gao, Feng
 ; APPLICANT: Shaw, George
 ; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1
 ; FILE REFERENCE: D6287
 ; CURRENT APPLICATION NUMBER: US/09/184,418C

Query Match Score 76.0%; Score 15.2%; DB 1; Length 2538;
 Best Local Similarity 85.0%; Pred. No. 6.1%;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO: 71
; LENGTH: 2571
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=94CY032.3; gene=env
US-09-184-418C-71

RESULT 29
Query Match 76.0%; Score 15.2; DB 1; Length 2571;
Best Local Similarity 85.0%; Pred. No. 6.1;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
SEQ ID NO: 71
QY 1 CTGTTAAATGGCACTCTAGC 20
Db 793 CTGTTAAATGGCAAGCTTAC 812

CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; LENGTH: 2579
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=92NG003; gene=tat
US-09-184-418C-51

RESULT 30
Query Match 76.0%; Score 15.2; DB 1; Length 2579;
Best Local Similarity 85.0%; Pred. No. 6.1;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
SEQ ID NO: 25
QY 1 CTGTTAAATGGCACTCTAGC 20
Db 1193 CTACTAAATGGTAGCTTAC 1212

CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; LENGTH: 2597
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=92NG003; gene=tat
US-09-184-418C-25

RESULT 31
Query Match 76.0%; Score 15.2; DB 1; Length 2597;
Best Local Similarity 85.0%; Pred. No. 6.1;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
SEQ ID NO: 1191
QY 1 CTGTTAAATGGCAAGCTTAC 20
Db 1191 CTGTTAAATGGAGCTTAC 1210

CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; LENGTH: 2597
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=92NG003; gene=tat
US-09-184-418C-52

Query Match 76.0%; Score 15.2; DB 1; Length 2597;

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; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO: 71
; LENGTH: 2571
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=94CY032.3; gene=env
US-09-184-418C-33
; Sequence 33; Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLOVES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; IMMUNODEFICIENCY VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO: 33
; LENGTH: 2606
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: Isolate=90CR056; gene=tat; CDS: join (5177..5391,
; OTHER INFORMATION: 7698..7782)
US-09-184-418C-33

Query Match 76.0%; Score 15.2; DB 1; Length 2606;
Best Local Similarity 85.0%; Pred. No. 6.1;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
SEQ ID NO: 68
QY 1 CTGTTAAATGGCACTCTAGC 20
Db 1157 CTATTAATGGAGCTTAC 1176

CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; LENGTH: 2643
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: Isolate=94CT032.3; gene=tat
US-09-184-418C-68

Query Match 76.0%; Score 15.2; DB 1; Length 2643;
Best Local Similarity 85.0%; Pred. No. 6.1;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
SEQ ID NO: 6
; TITLE OF INVENTION: CLOVES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; IMMUNODEFICIENCY VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO: 6
; LENGTH: 2643
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: Isolate=94CT032.3; gene=tat
US-09-184-418C-68

Query Match 76.0%; Score 15.2; DB 1; Length 2643;
Best Local Similarity 85.0%; Pred. No. 6.1;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
SEQ ID NO: 1
; TITLE OF INVENTION: CLOVES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; IMMUNODEFICIENCY VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO: 1
; LENGTH: 2643
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: Isolate=94CT032.3; gene=tat
US-09-184-418C-68

RESULT 33
US-09-184-418C-52

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Sequence 52, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 52
; LENGTH: 2645
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=92NG003; gene=rev
US-09-184-418C-52

Query Match      76.0%; Score 15.2; DB 1; Length 2645;
Best Local Similarity 85.0%; Pred. No. 6.1;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy   1 CTGTTAAATGGCACTCTAGC 20
Db   1054 CTACTAAATGGTACCTAGC 1073

RESULT 34
US-09-184-418C-34
; Sequence 34, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 34
; LENGTH: 2657
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=90CR056; gene=rev; CDS: join(5316..5391,
US-09-184-418C-34

Query Match      76.0%; Score 15.2; DB 1; Length 2657;
Best Local Similarity 85.0%; Pred. No. 6.1;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy   1 CTGTTAAATGGCACTCTAGC 20
Db   1018 CTTATAAATGGAAACCTAGC 1037

RESULT 35
US-09-184-418C-26
; Sequence 26, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 26
; LENGTH: 2653
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate="90CR056"; 137..1639:gene="gag"; 4388..4966:gene="vif";
; OTHER INFORMATION: 4908..5196:gene "vpr"; 5171..7702:gene="tat";
; OTHER INFORMATION: 5316..7972:gene="rev"; 5408..5630:gene="rpu";
; OTHER INFORMATION: 5577..8114:gene="env"; 8117..8737:gene="nef";
; OTHER INFORMATION: 5577..8114:gene="env"; 8117..8737:gene="nef";

```

US-09-184-418C-3

Query Match 76.0%; Score 15.2; DB 1; Length 8953;
Best Local Similarity 85.0%; Pred. No. 5.3; Length 8953;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 CTGTTAAATGGCAGTCAGC 20
Db 6333 CTATAAATGGAAACCTAGC 6352

RESULT 38

US-09-184-418C-5

; Sequence 5, Application US/09184418C

; GENERAL INFORMATION:
; Patient No. 6492110

; APPLICANT: Hahn, Beatrice

; APPLICANT: Gao, Feng

; APPLICANT: Shaw, George

; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1

; FILE REFERENCE: D6287

; CURRENT APPLICATION NUMBER: US/09/184.418C

; CURRENT FILING DATE: 1999-11-02

; NUMBER OF SEQ ID NOS: 112

; SEQ ID NO 7

; LENGTH: 9050

; TYPE: DNA

; ORGANISM: Human immunodeficiency virus type 1

; FEATURE:

; OTHER INFORMATION: isolate="94CY032.3"; 156..1658;"gag"; 1454..4462;"pol";
; Sequence 7, Application US/09184418C

; OTHER INFORMATION: 15.2%; Pred. No. 5.3; Length 9050;

; OTHER INFORMATION: 4407..4985;"vif"; 4925..5212;"vpr"; 5200..7842;"tat";
; Sequence 7, Application US/09184418C

; OTHER INFORMATION: 5339..8926;"rev"; 5433..5680;"vpu"; 5598..8168;"env";
; Sequence 7, Application US/09184418C

; OTHER INFORMATION: 8170..8829;"nef";
; Sequence 7, Application US/09184418C

US-09-184-418C-7

Query Match 76.0%; Score 15.2; DB 1; Length 9050;

Best Local Similarity 85.0%; Pred. No. 5.3; Length 9050;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 CTGTTAAATGGCAGTCAGC 20
Db 6390 CTGTTAAATGGAGCTAGC 6409

RESULT 41

US-09-184-418C-71/c

; Sequence 71, Application US/09184418C

; GENERAL INFORMATION:
; Patent No. 6492110

; APPLICANT: Hahn, Beatrice

; APPLICANT: Gao, Feng

; APPLICANT: Shaw, George

; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1

; FILE REFERENCE: D6287

; CURRENT APPLICATION NUMBER: US/09/184.418C

; CURRENT FILING DATE: 1999-11-02

; NUMBER OF SEQ ID NOS: 112

; SEQ ID NO 71

; LENGTH: 2571

; TYPE: DNA

; ORGANISM: Human immunodeficiency virus type 1

; FEATURE:

; OTHER INFORMATION: isolate="94CY032.3; gene=env";
; Sequence 71, Application US/09184418C

US-09-184-418C-71

Query Match 69.0%; Score 13.8; DB 1; Length 2571;

Best Local Similarity 88.2%; Pred. No. 14; Length 2571;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 4 TTAAATGGCAGTCAGC 20
Db 554 TTATGGCACCTAGC 538

Query Match 76.0%; Score 15.2; DB 1; Length 8987;

Best Local Similarity 85.0%; Pred. No. 5.3; Length 8987;

Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

RESULT 42

US-09-184-418C-68/c

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; Sequence 68, Application US/09184418C
; Patent No. 642110
; GENERAL INFORMATION:
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 68
; LENGTH: 2643
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=94CT032.3; gene=tat
US-09-184-418C-68

Query Match
Best Local Similarity 69.0%; Score 13.8%; DB 1; Length 2643;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 4 TTAATGGCAGTCTAGC 20
Db 952 TTAATGGCACTCTAGC 936

RESULT 43
US-09-184-418C-69/C
; Sequence 69, Application US/09184418C
; Patent No. 642110
; GENERAL INFORMATION:
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 69
; LENGTH: 2658
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=94CT032.3; gene=rev
US-09-184-418C-69

Query Match
Best Local Similarity 69.0%; Score 13.8%; DB 1; Length 2688;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 4 TTAATGGCAGTCTAGC 20
Db 813 TTAATGGCACTCTAGC 797

RESULT 44
US-09-184-418C-7/C
; Sequence 7, Application US/09184418C
; Patent No. 642110
; GENERAL INFORMATION:
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 104
; LENGTH: 2633
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=94IN476.104; gene=tat
US-09-184-418C-104

Query Match
Best Local Similarity 69.0%; Score 13.8%; DB 1; Length 9050;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 4 TTAATGGCAGTCTAGC 20
Db 6151 TTAATGGCACTCTAGC 6135

RESULT 45
US-09-184-418C-107
; Sequence 107, Application US/09184418C
; Patent No. 642110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 107
; LENGTH: 2574
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=94IN476.104; gene=env
US-09-184-418C-107

Query Match
Best Local Similarity 68.0%; Score 13.6%; DB 1; Length 2574;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 1 CTGTTAATGGCACTCTAGC 20
Db 769 CTGTTAATGGCACACAGC 788

RESULT 46
US-09-184-418C-104
; Sequence 104, Application US/09184418C
; Patent No. 642110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 104
; LENGTH: 2633
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=94IN476.104; gene=tat
US-09-184-418C-104

```

```

Query Match          68 0%; Score 13.6; DB 1; Length 2633;
Best Local Similarity 80 0%; Pred. No. 16;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
SEQ ID: 1 CGTAAATGGCAGCTAGC 20
Db          1175 CGTAAATGGTAGCACAGC 1194

RESULT 47
US-09-184-418C-105
; Sequence 105, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID: NO 105
; LENGTH: 2651
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=94IN476.104; gene=rev
US-09-184-418C-105

Query Match          68 0%; Score 13.6; DB 1; Length 2651;
Best Local Similarity 80 0%; Pred. No. 16;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
SEQ ID: 1 CGTAAATGGCAGCTAGC 20
Db          1036 CGTAAATGGTAGCACAGC 1055

RESULT 48
US-09-184-418C-11
; Sequence 11, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID: NO 11
; LENGTH: 8959
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=94IN476.104; 138.1613;"gag";
; OTHER INFORMATION: 1418.4428:pol; 4361.4939:vif; 4379.5169:"vpr";
; OTHER INFORMATION: 5150.7782:tat; 5209.7739:rev; 5378.5638:"vpu";
; OTHER INFORMATION: 5556.8129:"env"; 8131.8754:nef
US-09-184-418C-11

Query Match          68 0%; Score 13.6; DB 1; Length 8959;
Best Local Similarity 80 0%; Pred. No. 13;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
SEQ ID: 1 CGTAAATGGCAGCTAGC 20
Db          6324 CGTAAATGGTAGCACAGC 6143

```

```

RESULT 49
US-09-184-418C-81
; Sequence 81, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 81
; LENGTH: 621
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: nef
US-09-184-418C-81

Query Match      53 0%; Score 10.6; DB 1; Length 621;
Best Local Similarity 76.5%; Pred. No. 1.1e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 13; Conservative 4;
Qy          3 GTAAATGGCAAGTCATG 19
Db          15 GTCAAAAGCAAGTAGA 31

RESULT 50
US-09-184-418C-32/C
; Sequence 32, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 32
; LENGTH: 624
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate-92NG083; gene=nef
US-09-184-418C-32

Query Match      53.0%; Score 10.6; DB 1; Length 624;
Best Local Similarity 76.5%; Pred. No. 1.1e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 13; Conservative 4;
Qy          3 GTAAATGGCAAGTCATG 19
Db          417 GGTCAGTGGGAGCTAG 401

RESULT 51
US-09-184-418C-90
; Sequence 90, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 90
; LENGTH: 624
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate-92NG083; gene=nef
US-09-184-418C-90

```

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TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO: 90
LENGTH: 624
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=90AM751.3; gene=nef
US-09-184-418C-90

Query Match
Best Local Similarity 76.5%; Score 10.6; DB 1; Length 624;
Matches 13; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
SEQ ID NO: 90
Length: 624
Pred. No. 1.1e+02;
Score: 10.6;
DB: 1;
Length: 624;
Mismatches: 4;
Indels: 0;
Gaps: 0;

RESULT 54
US-09-184-418C-2/C
Sequence 2, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO: 74
Length: 3000
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=90ZM651.8; gene=pol
US-09-184-418C-74

Query Match
Best Local Similarity 91.7%; Score 10.4; DB 1; Length 3000;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
SEQ ID NO: 2
Length: 3000
Pred. No. 81;
Score: 10.4;
DB: 1;
Length: 3000;
Mismatches: 1;
Indels: 0;
Gaps: 0;

RESULT 55
US-09-184-418C-101
Sequence 101, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO: 101
Length: 3011
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=90ZM651.8; gene=pol
US-09-184-418C-101

Query Match
Best Local Similarity 91.7%; Score 10.4; DB 1; Length 3011;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
SEQ ID NO: 108
Length: 3011
Pred. No. 80;
Score: 10.4;
DB: 1;
Length: 3011;
Mismatches: 1;
Indels: 0;
Gaps: 0;

RESULT 53
US-09-184-418C-108
Sequence 108, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO: 108
Length: 624
TYPE: DNA

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Db 2662 AAATGGCACTAT 2673
RESULT 56
US-09-184-418C-92 Sequence 92, Application US/09184418C
; Patent No. 6492110 ;
; GENERAL INFORMATION: ;
; APPLICANT: Hahn, Beatrice ;
; APPLICANT: Gao, Feng ;
; APPLICANT: Shaw, George ;
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN ;
; TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1 ;
; CURRENT APPLICATION NUMBER: US/09/184,418C ;
; CURRENT FILING DATE: 1999-11-02 ;
; SEQ ID NO 92 ;
; LENGTH: 3012 ;
; TYPE: DNA ;
; ORGANISM: Human immunodeficiency virus type 1 ;
; FEATURE: OTHER INFORMATION: Isolate=94CY017.41; gene=pol ;
; US-09-184-418C-92

Query Match 52.0%; Score 10.4; DB 1; Length 3012;
Best Local Similarity 91.7%; Pred. No. 80; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 6 AAATGGCACTAT 17
Db 2675 AAATGGCACTAT 2686

RESULT 57
US-09-184-418C-B3 Sequence 83, Application US/09184418C
; Patent No. 6492110 ;
; GENERAL INFORMATION: ;
; APPLICANT: Hahn, Beatrice ;
; APPLICANT: Gao, Feng ;
; APPLICANT: Shaw, George ;
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN ;
; TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1 ;
; CURRENT APPLICATION NUMBER: US/09/184,418C ;
; CURRENT FILING DATE: 1999-11-02 ;
; SEQ ID NO B3 ;
; LENGTH: 3017 ;
; TYPE: DNA ;
; ORGANISM: Human immunodeficiency virus type 1 ;
; FEATURE: OTHER INFORMATION: Isolate=96AM751.3; gene=pol ;
; US-09-184-418C-83

Query Match 52.0%; Score 10.4; DB 1; Length 3017;
Best Local Similarity 91.7%; Pred. No. 80; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 6 AAATGGCACTAT 17
Db 2680 AAATGGCACTAT 2691

RESULT 58
US-09-184-418C-30/c Sequence 30, Application US/09184418C
; Patent No. 6492110 ;
; GENERAL INFORMATION: ;
; APPLICANT: Hahn, Beatrice ;
; APPLICANT: Gao, Feng ;
; APPLICANT: Shaw, George ;
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN ;
; FILE REFERENCE: D6287 ;
; CURRENT APPLICATION NUMBER: US/09/184,418C ;
; CURRENT FILING DATE: 1999-11-02 ;
; SEQ ID NO 46 ;
; LENGTH: 4307 ;
; TYPE: DNA ;
; ORGANISM: Human immunodeficiency virus type 1

RESULT 59
US-09-184-418C-57 Sequence 57, Application US/09184418C
; Patent No. 6492110 ;
; GENERAL INFORMATION: ;
; APPLICANT: Hahn, Beatrice ;
; APPLICANT: Gao, Feng ;
; APPLICANT: Shaw, George ;
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN ;
; FILE REFERENCE: D6287 ;
; CURRENT APPLICATION NUMBER: US/09/184,418C ;
; CURRENT FILING DATE: 1999-11-02 ;
; SEQ ID NO 30 ;
; LENGTH: 519 ;
; TYPE: DNA ;
; ORGANISM: Human immunodeficiency virus type 1 ;
; FEATURE: OTHER INFORMATION: Isolate=90CR056; gene=vif ;
; US-09-184-418C-30

Query Match 49.0%; Score 9.8; DB 1; Length 579;
Best Local Similarity 84.6%; Pred. No. 1,7e+02; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 5 TAATGGCACTCT 17
Db 243 TARATGCCATCT 231

RESULT 60
US-09-184-418C-48 Sequence 48, Application US/09184418C
; Patent No. 6492110 ;
; GENERAL INFORMATION: ;
; APPLICANT: Hahn, Beatrice ;
; APPLICANT: Gao, Feng ;
; APPLICANT: Shaw, George ;
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN ;
; FILE REFERENCE: D6287 ;
; CURRENT APPLICATION NUMBER: US/09/184,418C ;
; CURRENT FILING DATE: 1999-11-02 ;
; SEQ ID NO 57 ;
; LENGTH: 3012 ;
; TYPE: DNA ;
; ORGANISM: Human immunodeficiency virus type 1 ;
; FEATURE: OTHER INFORMATION: Isolate=93BR029; gene=pol; note=NH2-terminus ;
; OTHER INFORMATION: uncertain ;
; US-09-184-418C-57

Query Match 49.0%; Score 9.8; DB 1; Length 3012;
Best Local Similarity 84.6%; Pred. No. 1e+02; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 TGTTAAANGCAG 14
Db 2265 TGATAAATGTCAG 2277

FEATURE:
; OTHER INFORMATION: isolate=92NG003; gene=gag-pol fusion
US-09-184-418C-48

Query Match Score 9.8; DB 1; Length 4307;
Best Local Similarity 84.6%; Pred. No. 84;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 TGTAAATGCCAG 14
Db 3560 TGATAATGTCAG 3572

RESULT 61
Sequence 3, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 54
LENGTH: 2538
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
OTHER INFORMATION: isolate=92NG003; gene-env

US-09-184-418C-3/C
Sequence 3, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 3
LENGTH: 8953
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
OTHER INFORMATION: isolate="90CR056"; 137..1639:gene="gag"; 4388..4966:gene="vif";
OTHER INFORMATION: 4906..5196:gene "vpr"; 5171..7782:gene="lat";
OTHER INFORMATION: 5310..5972:gene="rev"; 5408..5630:gene="lvp";
OTHER INFORMATION: 5577..8114:gene="env"; 8117..8737:gene="nef";
JS-09-184-418C-3

Query Match Score 9.8; DB 1; Length 8953;
Best Local Similarity 84.6%; Pred. No. 51;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 5 TAATGGCACTCT 17
Db 4630 TAATGCCATTCT 4618

RESULT 62
Sequence 36, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 36
LENGTH: 2538
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
OTHER INFORMATION: isolate=90CR056; gene-env

US-09-184-418C-36/C
Sequence 36, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 36
LENGTH: 2538
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
OTHER INFORMATION: isolate=90CR056; gene-env

US-09-184-418C-36
Query Match Score 9.6; DB 1; Length 2538;
Best Local Similarity 75.0%; Pred. No. 1.2e-02;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 4 TTAAATGCCAGCTAG 19
Db 764 TTAAATACGATGAG 749

RESULT 63
Sequence 54, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 54
LENGTH: 2538
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=92NG003; gene-env

US-09-184-418C-54/C
Sequence 54, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 54
LENGTH: 2538
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=92NG003; gene-env

US-09-184-418C-54
Query Match Score 9.6; DB 1; Length 2538;
Best Local Similarity 75.0%; Pred. No. 1.2e-02;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2 TGTAAATGCCAGTCT 17
Db 1204 TGTACATGGAGTGT 1189

RESULT 64
Sequence 28, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 28
LENGTH: 2550
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=92NG003; gene-env

US-09-184-418C-28/C
Sequence 28, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 28
LENGTH: 2550
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=92NG003; gene-env

US-09-184-418C-28
Query Match Score 9.6; DB 1; Length 2550;
Best Local Similarity 75.0%; Pred. No. 1.2e-02;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2 TGTAAATGCCAGTCT 17
Db 1213 TGTACATGGAGTGT 1199

RESULT 65
Sequence 51, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice

APPLICANT: Gao, Feng
 APPLICANT: Shaw, George
 TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 FILE REFERENCE: D6287
 CURRENT APPLICATION NUMBER: US/09/184,418C
 CURRENT FILING DATE: 1999-11-02
 NUMBER OF SEQ ID NOS: 112
 SEQ ID NO: 51
 LENGTH: 2579
 TYPE: DNA
 ORGANISM: Human immunodeficiency virus type 1
 FEATURE:
 OTHER INFORMATION: isolate=92NG003; gene=tat
 US-09-184-418C-51

Query Match
 Best Local Similarity 75.0%; Pred. No. 1.2e+02; Length 2579;
 Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 Qy 2 TGTAAATGGCAAGTCT 17
 Db 1592 TCTTACATGGAGGTG 1577

RESULT 66
 US-09-184-418C-25/C
 Sequence 25, Application US/09184418C
 Patent No. 6492110
 GENERAL INFORMATION:
 APPLICANT: Gao, Feng
 APPLICANT: Shaw, George
 APPLICANT: Hahn, Beatrice
 APPLICANT: Gao, Feng
 TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 FILE REFERENCE: D6287
 CURRENT APPLICATION NUMBER: US/09/184,418C
 CURRENT FILING DATE: 1999-11-02
 NUMBER OF SEQ ID NOS: 112
 SEQ ID NO: 25
 LENGTH: 2557
 TYPE: DNA
 ORGANISM: Human immunodeficiency virus type 1
 FEATURE:
 OTHER INFORMATION: isolate=92NG003; gene=tat
 US-09-184-418C-25

Query Match
 Best Local Similarity 75.0%; Pred. No. 1.2e+02; Length 2597;
 Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 Qy 2 TGTAAATGGCAAGTCT 17
 Db 1607 TTATACATGGAGGT 1592

RESULT 67
 US-09-184-418C-33/C
 Sequence 33, Application US/09184418C
 Patent No. 6492110
 GENERAL INFORMATION:
 APPLICANT: Hahn, Beatrice
 APPLICANT: Gao, Feng
 APPLICANT: Shaw, George
 APPLICANT: Gao, Feng
 TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 FILE REFERENCE: D6287
 CURRENT APPLICATION NUMBER: US/09/184,418C
 CURRENT FILING DATE: 1999-11-02
 NUMBER OF SEQ ID NOS: 112
 SEQ ID NO: 33
 LENGTH: 2606
 TYPE: DNA

ORGANISM: Human immunodeficiency virus type 1
 FEATURE:
 OTHER INFORMATION: isolate=90CR056; gene=tat; CDS: join (5177..5391,
 US-09-184-418C-33
 Query Match Score 9.6%; DB 1; Length 2606;
 Best Local Similarity 75.0%; Pred. No. 1.2e+02; Mismatches 4; Indels 0; Gaps 0;
 Qy 4 TTAATGGCGAGTCAG 19
 Db 1164 TTTAATAGCGTTGAG 1149

RESULT 68
 US-09-184-418C-52/C
 Sequence 52, Application US/09184418C
 Patent No. 6492110
 GENERAL INFORMATION:
 APPLICANT: Hahn, Beatrice
 APPLICANT: Gao, Feng
 APPLICANT: Shaw, George
 TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 FILE REFERENCE: D6287
 CURRENT APPLICATION NUMBER: US/09/184,418C
 CURRENT FILING DATE: 1999-11-02
 NUMBER OF SEQ ID NOS: 112
 SEQ ID NO: 52
 LENGTH: 2645
 TYPE: DNA
 ORGANISM: Human immunodeficiency virus type 1
 FEATURE:
 OTHER INFORMATION: isolate=92NG003; gene=rev
 US-09-184-418C-52
 Query Match Score 9.6%; DB 1; Length 2645;
 Best Local Similarity 75.0%; Pred. No. 1.2e+02; Mismatches 4; Indels 0; Gaps 0;
 Qy 2 TGTTAAATGGCAGTCT 17
 Db 1453 TCTTACATGGAGGT 1438

RESULT 69
 US-09-184-418C-34/C
 Sequence 34, Application US/09184418C
 Patent No. 6492110
 GENERAL INFORMATION:
 APPLICANT: Hahn, Beatrice
 APPLICANT: Gao, Feng
 APPLICANT: Shaw, George
 TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 FILE REFERENCE: D6287
 CURRENT APPLICATION NUMBER: US/09/184,418C
 CURRENT FILING DATE: 1999-11-02
 NUMBER OF SEQ ID NOS: 112
 SEQ ID NO: 34
 LENGTH: 2657
 TYPE: DNA
 ORGANISM: Human immunodeficiency virus type 1
 FEATURE:
 OTHER INFORMATION: isolate=90CR056; gene=rev; CDS: join(5316..5391,
 US-09-184-418C-34
 Query Match Score 9.6%; DB 1; Length 2657;
 Best Local Similarity 75.0%; Pred. No. 1.2e+02; Mismatches 4; Indels 0; Gaps 0;

Qy 4 TAAATGGCAGTCAG 19
 Db 1025 TTAAATGGCAGTCAG 1010

RESULT 70
 US-09-184-418C-26/c
 ; Sequence 26, Application US/09184418C
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice
 ; APPLICANT: Gao, Feng
 ; APPLICANT: Shaw, George
 ; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 ; FILE REFERENCE: D6287
 ; CURRENT APPLICATION NUMBER: US/09/184,418C
 ; NUMBER OF SEQ ID NOS: 112
 ; SEQ ID NO 26
 ; LENGTH: 3063
 ; TYPE: DNA
 ; ORGANISM: Human immunodeficiency virus type 1
 ; FEATURE:
 ; OTHER INFORMATION: Isolate=92NG083; gene=rev
 US-09-184-418C-26

Query Match 48.0%; Score 9.6; DB 1; Length 2663;
 Best Local Similarity 75.0%; Pred. No. 1.2e+02;
 Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2 TGTAAATGGCAGTCAGT 17
 Db 1468 TTATACATGGGAGTG 1453

RESULT 73
 US-09-184-418C-92/c
 ; Sequence 92, Application US/09184418C
 ; Patent No. 6492110
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice
 ; APPLICANT: Gao, Feng
 ; APPLICANT: Shaw, George
 ; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 ; FILE REFERENCE: D6287
 ; CURRENT APPLICATION NUMBER: US/09/184,418C
 ; NUMBER OF SEQ ID NOS: 112
 ; SEQ ID NO 92
 ; LENGTH: 3012
 ; TYPE: DNA
 ; ORGANISM: Human immunodeficiency virus type 1
 ; FEATURE:
 ; OTHER INFORMATION: Isolate=92NG083; gene=rev
 US-09-184-418C-92

Query Match 48.0%; Score 9.6; DB 1; Length 3012;
 Best Local Similarity 75.0%; Pred. No. 1.1e+02;
 Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 5 TAATGGCAGTCAGC 20
 Db 1232 TCATTGACAGTCAGC 1217

RESULT 74
 US-09-184-418C-83/c
 ; Sequence 83, Application US/09184418C
 ; Patent No. 6492110
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice
 ; APPLICANT: Gao, Feng
 ; APPLICANT: Shaw, George
 ; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 ; FILE REFERENCE: D6287
 ; CURRENT APPLICATION NUMBER: US/09/184,418C
 ; NUMBER OF SEQ ID NOS: 112
 ; SEQ ID NO 83
 ; LENGTH: 3011

Query Match 48.0%; Score 9.6; DB 1; Length 3011;
 Best Local Similarity 75.0%; Pred. No. 1.1e+02;
 Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 5 TAATGGCAGTCAGC 20
 Db 1220 TCATTGACAGTCAGC 1205

RESULT 72
 US-09-184-418C-57/c
 ; Sequence 57, Application US/09184418C
 ; Patent No. 6492110
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice

TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=96AM751.3; gene=pol
SEQ ID NO: 6

Query Match 48.0% Score 9.6; DB 1; Length 3017;
Best Local Similarity 75.0%; Pred. No. 1.1e+02; Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

RESULT 75
Sequence 48, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 48
LENGTH: 4307
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=92NG003; gene=gag-pol fusion
SEQ ID NO: 99-184-418C-48

Query Match 48.0% Score 9.6; DB 1; Length 4307;
Best Local Similarity 75.0%; Pred. No. 89; Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

RESULT 76
Sequence 6, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 6
LENGTH: 8954
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=93R029; 142..1579:gene="gag"; 1437..4448:gene="pol";
OTHER INFORMATION: 4393..4971:gene="vif"; 4911..5201:gene="vpr";
OTHER INFORMATION: 5182..7782:gene="tat"; 5321..7932:gene="rev";
OTHER INFORMATION: 5586..8114:gene="env"; 8116..8736:gene="nef"
SEQ ID NO: 3-09-184-418C-6

Query Match 48.0% Score 9.6; DB 1; Length 8954;
Best Local Similarity 75.0%; Pred. No. 52; Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

RESULT 77
US-09-184-418C-11/c
Sequence 11, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 11
LENGTH: 8959
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: Isolate=94IN476_104; 138..1613:"gag";
OTHER INFORMATION: 1418..4428:"pol"; 4361..4939:"vif"; 4879..5169:"vpr";
OTHER INFORMATION: 5189..7939:"rev"; 5378..5638:"vpu";
OTHER INFORMATION: 5556..8129:"env"; 8131..8754:"nef"
US-09-184-418C-11

Query Match 48.0% Score 9.6; DB 1; Length 8959;
Best Local Similarity 75.0%; Pred. No. 52; Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

RESULT 78
US-09-184-418C-5/c
Sequence 5, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 5
LENGTH: 8966
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: Isolate="92NG003"; 157..1650:gene="gag"; 4405..4966:gene="vif";
OTHER INFORMATION: 4926..5039:gene="vpr"; 5184..7762:"cat";
OTHER INFORMATION: 5323..7967:gene="rev"; 5425..5654:gene="vpu";
OTHER INFORMATION: 5572..8109:gene="env"; 8111..8731:gene="nef"
US-09-184-418C-5

Query Match 48.0% Score 9.6; DB 1; Length 8966;
Best Local Similarity 75.0%; Pred. No. 52; Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

RESULT 79
2 TGTAAGTCAGTCGT 17
6775 TCTTACATGGAGTC 2653

RESULT 79
US-09-184-418C-1/C
Sequence 1, Application US/09184418C
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184, 418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 1
LENGTH: 83668
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE: DNA
OTHER INFORMATION: isolate=93BR020; 133..1611:gag; 4369..4947:vif;
OTHER INFORMATION: 4887..5177:vpr; 5158..7767:tat; 5299..7937:rev;
OTHER INFORMATION: 5396..5641:vpu; 5559..8099:env; 8101..8727:nef
US-09-184-418C-1

Query Match Score 9.6; DB 1; Length 8992;
Best Local Similarity 75.0%; Pred. No. 52;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

SEQ ID NO 4
LENGTH: 8992
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE: DNA
OTHER INFORMATION: isolate=92RW009; 139..1624:gag; 1690..4428:pol(N-terminus uncertain);
OTHER INFORMATION: 4373..4951:vif; 4891..5181:vpr; 5162..7901:tat; 5301..7958:rev;
OTHER INFORMATION: 5403..5648:vpu; 5566..8148:env; 8150..8773:nef
US-09-184-418C-4

Query Match Score 9.6; DB 1; Length 8992;
Best Local Similarity 75.0%; Pred. No. 52;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

RESULT 82
US-09-184-418C-10/C
Sequence 10, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184, 418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 10
LENGTH: 9060
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE: DNA
OTHER INFORMATION: isolate=94CY017..41..159..1649;"gag";
OTHER INFORMATION: 1442..4453;"pol"; 4398..4976;"vif"; 4916..5206;"vpr";
OTHER INFORMATION: 5187..7841;"tat"; 5326..8046;"rev";
OTHER INFORMATION: 5428..5673;"vpu"; 5591..8188;"env"; 8190..8843;"nef"
US-09-184-418C-10

Query Match Score 9.6; DB 1; Length 9060;
Best Local Similarity 75.0%; Pred. No. 51;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

RESULT 83
US-09-184-418C-108/C
Sequence 108, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184, 418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 9
LENGTH: 8972
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE: DNA
OTHER INFORMATION: isolate=96ZM751..3; 137..1632:gag; 1419..4435:pol;
OTHER INFORMATION: 4380..4958:vif; 4898..5188:vpr; 5169..7814:tat;
OTHER INFORMATION: 5308..7938:rev; 5407..5667:vpu; 5585..8128:env;
OTHER INFORMATION: 8130..8753:nef
US-09-184-418C-9

Query Match Score 9.6; DB 1; Length 8972;
Best Local Similarity 75.0%; Pred. No. 52;
Matches 12; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

RESULT 84
US-09-184-418C-4/C
Sequence 4, Application US/09184418C
Patent No. 6492110

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FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 108
; LENGTH: 624
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: Isolate=94IN476.104; gene=nef
US-09-184-418C-108
RESULT 84
Query Match Score 9.4; DB 1; Length 624;
Best Local Similarity 68.4%; Pred. No. 2e+02;
Matches 13; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
Qy 1 CTGTTAAATGGCAG 14
Db 612 CTGTTAAATGGCTG 599

Query Match Score 9.4; DB 1; Length 624;
Best Local Similarity 68.4%; Pred. No. 2e+02;
Matches 13; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
Qy 1 CTGTTAAATGGCAGCTAG 19
Db 280 CTTTAAAAAGAAGGCCAG 262

RESULT 84
US-09-184-418C-56/c
Sequence 66, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 41
; LENGTH: 2640
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: Isolate=92RW009; gene=tat
US-09-184-418C-41
RESULT 87
US-09-184-418C-42/c
Sequence 42, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 42
; LENGTH: 2658
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: Isolate=92RW009; gene=rev
US-09-184-418C-42
RESULT 85
US-09-184-418C-4/c
Sequence 44, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; CURRENT APPLICATION NUMBER: US/09/184,418C
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 44
; LENGTH: 2583
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: Isolate=92RW009; gene=env
US-09-184-418C-44
RESULT 88

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S-09-184-418C-21/C
Sequence 21, Application US/09184418C
Patent No. 6492110
GENERAL INFORMATION
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 21
LENGTH: 207
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=92RN009; gene=vpr
S-09-184-418C-21
Query Match 45.0%; Score 9; DB 1; Length 291;
Best Local Similarity 70.6%; Pred. No. 3.1e+02;
Matches 12; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
Query Match 45.0%; Score 9; DB 1; Length 621;
Best Local Similarity 70.6%; Pred. No. 2.5e+02;
Matches 12; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
; OTHER INFORMATION: isolate=93BR029; gene=nef
US-09-184-418C-63

QY 3 GTTAAATGGCAGTCAG 19
||| ||| | ||| |
Db 15 GTCAAAAGTAGTATAG 31

RESULT 91
US-09-184-418C-32
Sequence 32, Application US/09184418C
; Sequence 32, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 32
; LENGTH: 624
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=92NG083; gene=nef
US-09-184-418C-32

QY 4 TTAAATGGCAGTCAGC 20
||| ||| | ||| |
Db 556 TTAAACAGTAGCTAGC 572

RESULT 89
US-09-184-418C-40
Sequence 40, Application US/09184418C
PATENT NO 6492110
GENERAL INFORMATION
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 40
LENGTH: 291
TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=92RN009; gene=vpr
S-09-184-418C-40
Query Match 45.0%; Score 9; DB 1; Length 291;
Best Local Similarity 70.6%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
Query Match 45.0%; Score 9; DB 1; Length 624;
Best Local Similarity 70.6%; Pred. No. 2.5e+02;
Matches 12; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
; OTHER INFORMATION: isolate=92NG083; gene=nef
US-09-184-418C-32

QY 4 TTAAATGGCAGTCAGC 20
||| ||| | ||| |
Db 556 TTAAACAGTAGCTAGC 572

RESULT 92
US-09-184-418C-45
Sequence 45, Application US/09184418C
; Sequence 45, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 45
; LENGTH: 624
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=92RW009; gene=nef
US-09-184-418C-45

Query Match 45.0%; Score 9; DB 1; Length 624;

```

Best Local Similarity 70.6%; Pred. No. 2.5e+02; Mismatches 5; Indels 0; Gaps 0;
 Matches 12; Conservative 0; General Information:
 SEQ ID NO: 6492110 Application US/09184418C
 / GENERAL INFORMATION:
 / APPLICANT: Hahn, Beatrice
 / APPLICANT: Gao, Feng
 / APPLICANT: Shaw, George
 / TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 / FILE REFERENCE: D6287
 / CURRENT APPLICATION NUMBER: US/09/184,418C
 / CURRENT FILING DATE: 1999-11-02
 / NUMBER OF SEQ ID NOS: 112
 / SEQ ID NO 82
 / LENGTH: 1496
 / TYPE: DNA
 / ORGANISM: Human immunodeficiency virus type 1
 / FEATURE:
 / OTHER INFORMATION: isolate=96ZM751.3; gene=gag
 US-09-184-418C-82

Query Match 45.0%; Score 9; DB 1; Length 1496;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0;
 SEQ ID NO: 6492110 Application US/09184418C
 / GENERAL INFORMATION:
 / APPLICANT: Hahn, Beatrice
 / APPLICANT: Gao, Feng
 / APPLICANT: Shaw, George
 / TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 / FILE REFERENCE: D6287
 / CURRENT APPLICATION NUMBER: US/09/184,418C
 / CURRENT FILING DATE: 1999-11-02
 / NUMBER OF SEQ ID NOS: 112
 / SEQ ID NO 82
 / LENGTH: 1496
 / TYPE: DNA
 / ORGANISM: Human immunodeficiency virus type 1
 / FEATURE:
 / OTHER INFORMATION: isolate=94IN476.104; gene=gag
 US-09-184-418C-100

RESULT 96
 US-09-184-418C-29
 Sequence 29, Application US/09184418C
 / General Information:
 / Patent No. 6492110
 / APPLICANT: Hahn, Beatrice
 / APPLICANT: Gao, Feng
 / APPLICANT: Shaw, George
 / TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 / FILE REFERENCE: D6287
 / CURRENT APPLICATION NUMBER: US/09/184,418C
 / CURRENT FILING DATE: 1999-11-02
 / NUMBER OF SEQ ID NOS: 112
 / SEQ ID NO 29
 / LENGTH: 1503
 / TYPE: DNA
 / ORGANISM: Human immunodeficiency virus type 1
 / FEATURE:
 / OTHER INFORMATION: isolate=90CR056; gene=gag; CDS:
 US-09-184-418C-29

Query Match 45.0%; Score 9; DB 1; Length 1503;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0;
 SEQ ID NO: 6492110 Application US/09184418C
 / GENERAL INFORMATION:
 / APPLICANT: Hahn, Beatrice
 / APPLICANT: Gao, Feng
 / APPLICANT: Shaw, George
 / TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 / FILE REFERENCE: D6287
 / CURRENT APPLICATION NUMBER: US/09/184,418C
 / CURRENT FILING DATE: 1999-11-02
 / NUMBER OF SEQ ID NOS: 112
 / SEQ ID NO 12
 / LENGTH: 1479
 / TYPE: DNA
 / ORGANISM: Human immunodeficiency virus type 1
 / FEATURE:
 / OTHER INFORMATION: isolate=93BR020; gene=gag
 US-09-184-418C-12

RESULT 97
 US-09-184-418C-89/c
 Sequence 89, Application US/09184418C
 / General Information:
 / Patent No. 6492110
 / APPLICANT: Hahn, Beatrice
 / APPLICANT: Gao, Feng
 / APPLICANT: Shaw, George
 / TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 / FILE REFERENCE: D6287
 / CURRENT APPLICATION NUMBER: US/09/184,418C
 / CURRENT FILING DATE: 1999-11-02

Query Match 45.0%; Score 9; DB 1; Length 1479;
 Best Local Similarity 100.0%; Pred. No. 1.9e+02;
 Matches 9; Conservative 0; Mismatches 0; Indels 0;
 SEQ ID NO: 6492110 Application US/09184418C
 / GENERAL INFORMATION:
 / APPLICANT: Hahn, Beatrice
 / APPLICANT: Gao, Feng
 / APPLICANT: Shaw, George
 / TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
 / FILE REFERENCE: D6287
 / CURRENT APPLICATION NUMBER: US/09/184,418C
 / CURRENT FILING DATE: 1999-11-02

RESULT 95
 JS-09-184-418C-82
 ; Sequence 82, Application US/09184418C

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; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 89
; LENGTH: 2544
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=96AM751.3; gene=env
US-09-184-418C-89

RESULT 100
Query Match 45.0%; Score 9; DB 1; Length 2544;
Best Local Similarity 70.6%; Prd. No. 1.4e+02;
Matches 12; Conservative 0; Mismatches 5; Indels 0;
Gaps 0;
Db 4 TAAATGGCACTAGC 20
Db 557 TTATGGACTATAC 541

RESULT 98
US-09-184-418C-98/C
; Sequence 98, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLOONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 86
; LENGTH: 2646
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=96AM751.3; gene=tat
US-09-184-418C-86

Query Match 45.0%; Score 9; DB 1; Length 2646;
Best Local Similarity 70.6%; Prd. No. 1.4e+02;
Matches 12; Conservative 0; Mismatches 5; Indels 0;
Gaps 0;
Db 4 TAAATGGCACTAGC 20
Db 973 TTATGGACTATAC 957

RESULT 101
US-09-184-418C-95/C
; Sequence 95, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLOONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 95
; LENGTH: 2655
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=94CY017.41; gene=tat
US-09-184-418C-95

Query Match 45.0%; Score 9; DB 1; Length 2598;
Best Local Similarity 70.6%; Prd. No. 1.4e+02;
Matches 12; Conservative 0; Mismatches 5; Indels 0;
Gaps 0;
Db 2 TGTTAAATGGCACTATA 18
Db 1040 TGTAAGTCATCCCA 1024

RESULT 99
US-09-184-418C-87/C
; Sequence 87, Application US/09184418C
; Patent No. 6492110
; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLOONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 87
; LENGTH: 2631
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=96ZM751.3; gene=rev
US-09-184-418C-87

Query Match 45.0%; Score 9; DB 1; Length 2631;
Best Local Similarity 70.6%; Prd. No. 1.4e+02;
Db 1444 TGTAAGTCATCCCA 1428

RESULT 102
US-09-184-418C-96/C
; Sequence 96, Application US/09184418C
; Patent No. 6492110

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; GENERAL INFORMATION:
; APPLICANT: Hahn, Beatrice
; APPLICANT: Gao, Feng
; APPLICANT: Shaw, George
; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
; FILE REFERENCE: D6287
; CURRENT APPLICATION NUMBER: US/09/184,418C
; CURRENT FILING DATE: 1999-11-02
; NUMBER OF SEQ ID NOS: 112
; SEQ ID NO 95
; LENGTH: 2741
; TYPE: DNA
; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: Isolate=94CY017.41; gene=rev
US-09-184-418C-95

RESULT 103
Query Match Score 9; DB 1; Length 2721;
Best Local Similarity 70.6%; Pred. No. 1.4e+02;
Matches 12; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
Qy 2 TGTAAATGGCAGTATA 18
Db 1305 TGTAAATGTCATCC 1289

Query Match Score 8.8; DB 1; Length 579;
Best Local Similarity 83.3%; Pred. No. 2.8e+02;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 6 AAATGGCAGTCT 17
Db 242 AAATGCCAATCT 231

RESULT 105
Query Match Score 8.8; DB 1; Length 579;
Best Local Similarity 83.3%; Pred. No. 2.8e+02;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 6 AAATGGCAGTCT 17
Db 242 AAATGCCAATCT 231

RESULT 106
Query Match Score 8.8; DB 1; Length 579;
Best Local Similarity 83.3%; Pred. No. 2.8e+02;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 6 AAATGGCAGTCT 17
Db 242 AAATGCCAATCT 231

RESULT 107
Query Match Score 8.8; DB 1; Length 579;
Best Local Similarity 83.3%; Pred. No. 2.8e+02;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 6 AAATGGCAGTCT 17
Db 242 AAATGCCAATCT 231

RESULT 108
Query Match Score 8.8; DB 1; Length 579;
Best Local Similarity 83.3%; Pred. No. 2.8e+02;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 6 AAATGGCAGTCT 17
Db 242 AAATGCCAATCT 231

RESULT 109
Query Match Score 8.8; DB 1; Length 579;
Best Local Similarity 83.3%; Pred. No. 2.8e+02;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 6 AAATGGCAGTCT 17
Db 242 AAATGCCAATCT 231

RESULT 110
Query Match Score 8.8; DB 1; Length 579;
Best Local Similarity 83.3%; Pred. No. 2.8e+02;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 6 AAATGGCAGTCT 17
Db 242 AAATGCCAATCT 231

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QY 9 TGGCAGTCAGC 20
 Db 305 TGGCAGACCAGC 316

RESULT 107
 US-09-184-418C-75/C
 ; Sequence 75, Application US/09184418C
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice
 ; APPLICANT: Shaw, George
 ; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1
 ; FILE REFERENCE: D6287
 ; CURRENT APPLICATION NUMBER: US/09/184,418C
 ; CURRENT FILING DATE: 1999-11-02
 ; NUMBER OF SEQ ID NOS: 112
 ; SEQ ID NO 84
 ; LENGTH: 579
 ; TYPE: DNA
 ; ORGANISM: Human immunodeficiency virus type 1
 ; FEATURE:
 ; OTHER INFORMATION: isolate=96ZM751.3; gene=vif
 US-09-184-418C-84

Query Match 44.0%; Score 8.8; DB 1; Length 579;
 Best Local Similarity 83.3%; Pred. No. 2.8e+0;
 Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 6 AAATGGCAGTCT 17
 Db 242 AAATGCCATTCT 231

RESULT 110
 US-09-184-418C-93/c
 ; Sequence 93, Application US/09184418C
 ; Patent No. 6492110
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice
 ; APPLICANT: Gao, Feng
 ; APPLICANT: Shaw, George
 ; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1
 ; FILE REFERENCE: D6287
 ; CURRENT APPLICATION NUMBER: US/09/184,418C
 ; CURRENT FILING DATE: 1999-11-02
 ; NUMBER OF SEQ ID NOS: 112
 ; SEQ ID NO 93
 ; LENGTH: 579
 ; TYPE: DNA
 ; ORGANISM: Human immunodeficiency virus type 1
 ; FEATURE:
 ; OTHER INFORMATION: isolate=94CY017.41; gene=vif
 US-09-184-418C-93

Query Match 44.0%; Score 8.8; DB 1; Length 579;
 Best Local Similarity 83.3%; Pred. No. 2.8e+0;
 Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 6 AAATGGCAGTCT 17
 Db 242 AAGGCGCAGTCT 231

RESULT 111
 US-09-184-418C-102
 ; Sequence 102, Application US/09184418C
 ; Patent No. 6492110
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice
 ; APPLICANT: Gao, Feng
 ; APPLICANT: Shaw, George
 ; TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN IMMUNODEFICIENCY VIRUS TYPE 1
 ; FILE REFERENCE: D6287
 ; CURRENT APPLICATION NUMBER: US/09/184,418C
 ; CURRENT FILING DATE: 1999-11-02
 ; NUMBER OF SEQ ID NOS: 112
 ; SEQ ID NO 102
 ; LENGTH: 579
 ; TYPE: DNA

RESULT 109
 US-09-184-418C-84/C
 ; Sequence 84, Application US/09184418C
 ; Patent No. 6492110
 ; GENERAL INFORMATION:
 ; APPLICANT: Hahn, Beatrice

QY 9 TGGCAGTCAGC 20
 Db 305 TGGCAGACCAGC 316

; ORGANISM: Human immunodeficiency virus type 1
; FEATURE:
; OTHER INFORMATION: isolate=94IN476.104; gene=vif
US-09-184-418C-102

Query Match Score 8.8; DB 1; Length 579;
Best Local Similarity 83.3%; Pred. No. 2.8e+02;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 9 TGGCACTCTAGC 20
Db 305 TGGCAGACCGC 316

RESULT 112
US-09-184-418C-102/c
Sequence 102, Application US/09184418C
PATENT No. 6,921,10
GENERAL INFORMATION:
APPLICANT: Hahn, Beatrice
APPLICANT: Gao, Feng
APPLICANT: Shaw, George
TITLE OF INVENTION: CLONES AND SEQUENCES FOR NON-SUBTYPE B ISOLATES OF HUMAN
TITLE OF INVENTION: IMMUNODEFICIENCY VIRUS TYPE 1
FILE REFERENCE: D6287
CURRENT APPLICATION NUMBER: US/09/184,418C
CURRENT FILING DATE: 1999-11-02
NUMBER OF SEQ ID NOS: 112
SEQ ID NO 102
LENGTH: 579

TYPE: DNA
ORGANISM: Human immunodeficiency virus type 1
FEATURE:
OTHER INFORMATION: isolate=94IN476.104; gene=vif
US-09-184-418C-102

Query Match Score 8.8; DB 1; Length 579;
Best Local Similarity 83.3%; Pred. No. 2.8e+02;
Matches 10; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 6 AAATGGCACGCT 17
Db 242 AAATGCCAACT 231

Search completed: September 11, 2003, 15:02:08
Job time : 5 secs